

CLAIMS

1. A controllably dissolvable silica-xerogel prepared via sol-gel process.

2. The controllably dissolvable silica-xerogel according to claim 1, wherein said process is such that gelation of the sol and evaporation of the solvent occur simultaneously, and where particles of small diameter are produced.

3. The controllably dissolvable silica xerogel according to claim 2, wherein the gelation of the sol and evaporation of the solvent occur by a spray drying method or by a fiber spinning or drawing technique.

4. A controllably dissolvable silica-xerogel particle of small diameter prepared via sol-gel process, where gelation of the sol and evaporation of the solvent occur simultaneously.

5. The controllably dissolvable silica-xerogel particle according to claim 4, wherein said particle is prepared by a spray drying method or by a fiber spinning or drawing technique.

6. The controllably dissolvable silica-xerogel particle according to claim 5, wherein said particle comprises a sphere or a fiber.

7. A delivery device comprising the controllably dissolvable silica-xerogel according to any one of claims 1-3, wherein said silica-xerogel contains a biologically active agent.

8. A delivery device comprising the controllably dissolvable silica-xerogel particle according to any one of claims 4-6, wherein said particle contains a biologically active agent.

9. The delivery device according to claim 7 or 8, wherein said biologically active agent is a medicine, a protein, a hormone, a living or dead cell, a bacteria, a virus or a part thereof.

10. The delivery device according to claim 9, wherein said biologically active agent is a medicine.

11. The delivery device according to claim 10, wherein said biologically active agent is toremifene or acid addition salt thereof.

5 12. The delivery device according to claim 11, wherein said biologically active agent is toremifene citrate.

13. The delivery device according to any one of claims 7-12, wherein said delivery device is implantable into a human or animal body.

10 14. The delivery device according to any one of claims 7-12, wherein said delivery device can be attached transmucosally or injected into a human or animal body.

15 15. A pharmaceutical preparation comprising a delivery device according to claim 7.

16. A pharmaceutical preparation comprising a delivery device according to claim 8.

20 17. An implantable medical device comprising a controllably dissolvable silica-xerogel particle of small diameter produced via a sol-gel process where the gelation of the sol and evaporation of the solvent occur simultaneously.

25 18. An implantable medical device according to claim 17, further comprising a biologically active agent.

30 19. A method of administering a biologically active agent into a human or animal body, wherein said method comprises implanting, injecting, or transmucosally attaching a delivery device, wherein said delivery device comprises a controllably dissolvable silica-xerogel, wherein said silica-xerogel, is produced by a sol-gel process, and wherein said silica-xerogel comprises a biologically active agent.

35 20. A method according to claim 19, wherein said silica-xerogel comprises a particle of small diameter prepared via sol-gel process where the gelation of the sol and evaporation of the solvent occur simultaneously.

21. A method of administering a biologically active agent into a human or animal body, wherein said method comprises implanting, injecting, or transmucosally attaching a delivery device, wherein said delivery device comprises a controllably dissolvable silica-xerogel, wherein said silica-xerogel, is prepared from tetraethoxysilane, and wherein said silica-xerogel comprises toremifene citrate.

22. A method according to claim 21, wherein said silica-xerogel comprises a particle of small diameter prepared via sol-gel process where the gelation of the sol and evaporation of the solvent occur simultaneously.